

Soundweb™ London
BLU-HIF
Installation Guide
18-0777-B



IMPORTANT SAFETY INSTRUCTIONS

DECLARATION OF CONFORMITY

Manufacturer's Name:
BSS Audio

Manufacturer's Address:
8760 S. Sandy Parkway
Sandy, Utah 84070, USA

declares that the product:

Product name: **BLU-HIF**
Note: Product name may be suffixed by the EU.

Product option:
None

conforms to the following Product Specifications:

Safety: IEC 60065-01+Amd. 1
EMC: EN 55022:2006
EN 61000-4-2

Supplementary Information:

The product herewith complies with the requirements of the:
Low Voltage Directive 2006/95/EC
EMC Directive 2004/108/EC.
RoHS Directive 2002/95/EC
WEEE Directive 2002/96/EC

With regard to Directive 2005/32/EC and EC Regulation 1275/2008 of 17 December 2008, this product is designed, produced, and classified as Professional Audio Equipment and thus is exempt from this Directive.

Roger Johnson
Vice-President of Engineering
8760 S. Sandy Parkway
Sandy, Utah 84070, USA
Date: June 16, 2010

European Contact: Your local BSS Audio Sales and Service Office or

Harman Music Group
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U.K. MAINS PLUG WARNING

A molded mains plug that has been cut off from the cord is unsafe. Discard the mains plug at a suitable disposal facility.

NEVER UNDER ANY CIRCUMSTANCES SHOULD YOU INSERT A DAMAGED OR CUT MAINS PLUG INTO A 13 AMP POWER SOCKET.

Do not use the mains plug without the fuse cover in place. Replacement fuse covers can be obtained from your local retailer. Replacement fuses are 13 amps and **MUST** be ASTA approved to BS1362.



WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE

The symbols shown above are internationally accepted symbols that warn of potential hazards with electrical products. The lightning flash with arrowpoint in an equilateral triangle means that there are dangerous voltages present within the unit. The exclamation point in an equilateral triangle indicates that it is necessary for the user to refer to the owner's manual.

These symbols warn that there are no user serviceable parts inside the unit. Do not open the unit. Do not attempt to service the unit yourself. Refer all servicing to qualified personnel. Opening the chassis for any reason will void the manufacturer's warranty. Do not get the unit wet. If liquid is spilled on the unit, shut it off immediately and take it to a dealer for service. Disconnect the unit during storms to prevent damage.

ELECTROMAGNETIC COMPATIBILITY

This unit conforms to the Product Specifications noted on the **Declaration of Conformity**. Operation is subject to the following two conditions:

- this device may not cause harmful interference, and
- this device must accept any interference received, including interference that may cause undesired operation.

Operation of this unit within significant electromagnetic fields should be avoided.

- use only shielded interconnecting cables.

SAFETY INSTRUCTIONS

NOTICE FOR CUSTOMERS IF YOUR UNIT IS EQUIPPED WITH A POWER CORD.

WARNING: THIS APPLIANCE SHALL BE CONNECTED TO A MAINS SOCKET OUTLET WITH A PROTECTIVE EARTHING CONNECTION.

The cores in the mains lead are coloured in accordance with the following code:

GREEN and YELLOW - Earth **BLUE** - Neutral **BROWN** - Live

As colours of the cores in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

- The core which is coloured green and yellow must be connected to the terminal in the plug marked with the letter E, or with the earth symbol, or coloured green, or green and yellow.
- The core which is coloured blue must be connected to the terminal marked N or coloured black.
- The core which is coloured brown must be connected to the terminal marked L or coloured red.

This equipment may require the use of a different line cord, attachment plug, or both, depending on the available power source at installation. If the attachment plug needs to be changed, refer servicing to qualified service personnel who should refer to the table below. The green/yellow wire shall be connected directly to the units chassis.

	CONDUCTOR	WIRE COLOR	
		Normal	Alt
L	LIVE	BROWN	BLACK
N	NEUTRAL	BLUE	WHITE
E	EARTH GND	GREEN/YEL	GREEN

WARNING: If the ground is defeated, certain fault conditions in the unit or in the system to which it is connected can result in full line voltage between chassis and earth ground. Severe injury or death can then result if the chassis and earth ground are touched simultaneously.

WARNING FOR YOUR PROTECTION READ THE FOLLOWING:

KEEP THESE INSTRUCTIONS

HEED ALL WARNINGS

FOLLOW ALL INSTRUCTIONS

THE APPARATUS SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING LIQUID AND NO OBJECT FILLED WITH LIQUID, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS

CLEAN ONLY WITH A DRY CLOTH.

DO NOT BLOCK ANY OF THE VENTILATION OPENINGS. INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

DO NOT INSTALL NEAR ANY HEAT SOURCES SUCH AS RADIATORS, HEAT REGISTERS, STOVES, OR OTHER APPARATUS (INCLUDING AMPLIFIERS) THAT PRODUCE HEAT.

ONLY USE ATTACHMENTS/ACCESSORIES SPECIFIED BY THE MANUFACTURER.

UNPLUG THIS APPARATUS DURING LIGHTNING STORMS OR WHEN UNUSED FOR LONG PERIODS OF TIME.

Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or third prong are provided for your safety. If the provided plug does not fit your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

Use only with the cart stand, tripod bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



POWER ON/OFF SWITCH: For products provided with a power switch, the power switch DOES NOT break the connection from the mains.

MAINS DISCONNECT: The plug shall remain readily operable. For rack-mount or installation where plug is not accessible, an all-pole mains switch with a contact separation of at least 3 mm in each pole shall be incorporated into the electrical installation of the rack or building.

FOR UNITS EQUIPPED WITH EXTERNALLY ACCESSIBLE FUSE RECEPTACLE: Replace fuse with same type and rating only.

MULTIPLE-INPUT VOLTAGE: This equipment may require the use of a different line cord, attachment plug, or both, depending on the available power source at installation. Connect this equipment only to the power source indicated on the equipment rear panel. To reduce the risk of fire or electric shock, refer servicing to qualified service personnel or equivalent.

If connected to a 240V supply, a suitable CSA/UL certified power cord shall be used for this supply.

POWER ADAPTER: Ensure a minimum of 8 inches of clearance and ventilation around the adapter.

If you want to dispose this product, do not mix it with general household waste. There is a separate collection system for used electronic products in accordance with legislation that requires proper treatment, recovery and recycling.

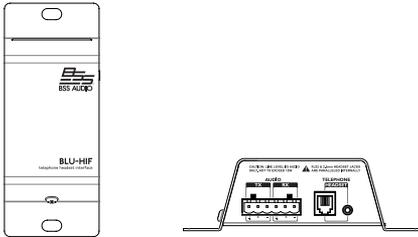
Private household in the 25 member states of the EU, in Switzerland and Norway may return their used electronic products free of charge to designated collection facilities or to a retailer (if you purchase a similar new one).

For Countries not mentioned above, please contact your local authorities for a correct method of disposal. By doing so you will ensure that your disposed product undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health.

Operating Instructions

Overview

The BSS Audio BLU-HIF Telephone Headset Interface facilitates connection of the headset jack of a VoIP/digital phone to an AEC input and analog output of a Soundweb London device. The BLU-HIF therefore allows the VoIP/digital phone to be used as the dialing interface and hybrid for a conference system. This simple interface eliminates the programming requirements associated with third-party control systems, while providing a familiar and low-cost dialing interface to the end user.



Connections

Audio Tx

This balanced connection is for sending near-side audio. Connect it to a standard analog output of a Soundweb London device. See Figures 1 and 2 for system connection and DSP configuration diagrams.

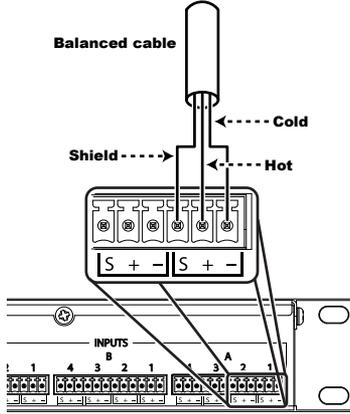
Audio Rx

This balanced connection is for receiving far-side audio. Connect it to an AEC input on a Soundweb London device. See Figures 1 and 2 for system connection and DSP configuration diagrams. While the BLU-HIF provides substantial isolation of the Rx and Tx signals, near-side audio will still be heard on the Rx channel due to the presence of side-tone. As such, BSS Audio recommends always feeding the Rx channel to an AEC input, as opposed to a standard analog input. The AEC algorithm will remove the side-tone.

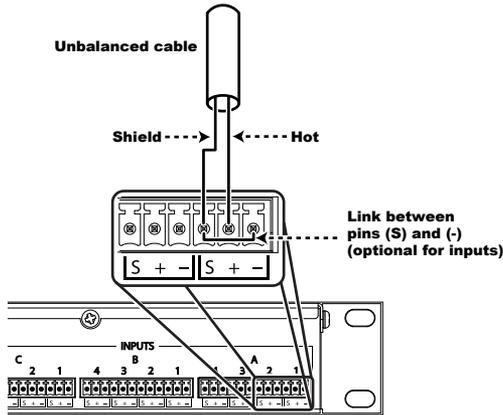
The Audio Tx and Rx connections are via Klippon pluggable terminal block connectors (also known as BL, Phoenix or Combicon). 6-way female Klippon connectors are supplied for making these connections.

Soundweb products provide cable shielding 'back from the destination' to eliminate ground loop problems. This means that the shield (S) connection on an input is grounded, whereas the shield connection on an output is floating (although connected via an internal network to ground for EMC compliance).

Balanced wiring - The convention for balanced wiring (2-core plus shield) is shown here:



Unbalanced wiring - The convention for unbalanced wiring to the inputs (1-core plus shield) is shown here:



Telephone Headset – RJ-22 Jack

The BLU-HIF features an RJ-22 jack for connection to the headset jack of a VoIP/digital phone. See Figure 1 for a system connection diagram using the telephone headset RJ-22 jack. The wiring configuration within the headset jack of a VoIP/digital phone often differs, depending on the manufacturer. The BLU-HIF comes with two cables whose 4P4C RJ-22 connectors are compatible with the two most common wiring configurations found in the headset jack of VoIP/digital phones. See Figure 3 for the BLU-HIF internal wiring diagram.

Caution: before connecting to the RJ-22 jack, ensure that the internal jumper is set to the appropriate position. Do not connect to both Telephone Headset jacks (RJ-22 and 2.5mm) on the BLU-HIF simultaneously. Doing so risks damaging the connected devices. By default, the BLU-HIF ships with the jumper set to the Telephone Headset RJ-22 jack position. See Figure 5 for an internal jumper configuration diagram.

Telephone Headset – 2.5mm Jack

The additional 2.5mm jack facilitates connection of two-way communication devices such as cellular phones to a Soundweb London device. This gives the end user the advantage of having an alternate communication path to the outside world, which is particularly useful as a backup to the main phone system. See Figure 3 for the BLU-HIF internal wiring diagram.

Caution: Before connecting to the 2.5mm jack, ensure that the internal jumper is set to the appropriate position. Do not connect to both Telephone Headset jacks (RJ-22 and 2.5mm) on the BLU-HIF simultaneously. Doing so risks damaging the connected devices. By default, the BLU-HIF ships with the jumper set to the Telephone Headset RJ-22 jack position. See Figure 5 for an internal jumper configuration diagram.

Diagrams

Figure 1: Using the BLU-HIF with a VoIP/Digital Telephone

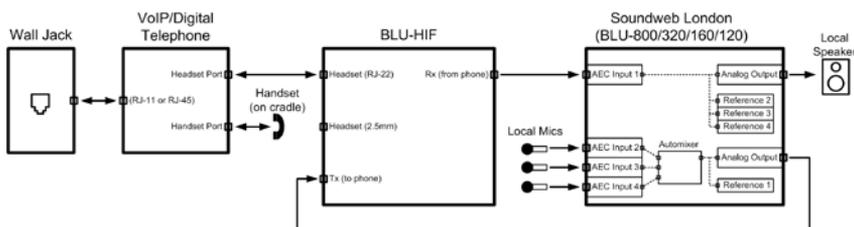


Figure 2: Using the BLU-HIF with a Phone Equipped with a 2.5mm TRS Jack

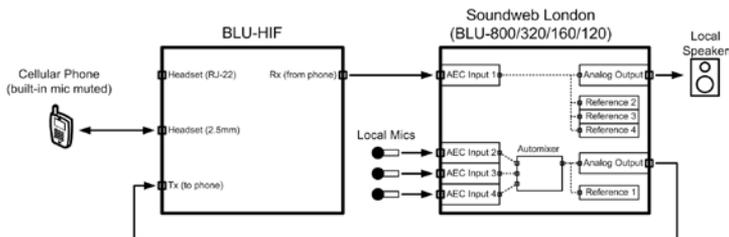
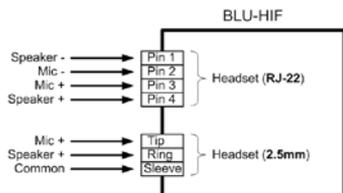


Figure 3: Wiring Diagram – BLU-HIF Telephone Headset Jacks



Caution: Do not connect to both jacks simultaneously. Doing so risks damaging the connected devices. Before connecting to either jack, ensure that the internal jumper is set to the appropriate position. By default, the BLU-HIF ships with the jumper in the Headset RJ-22 jack position.

Figure 4: Locating the Internal Jumper

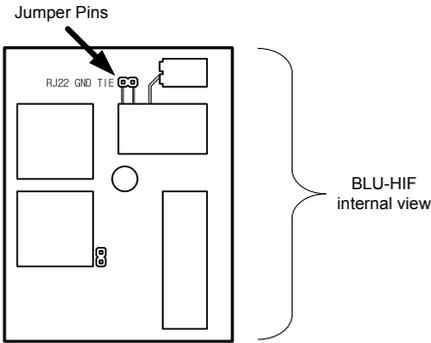
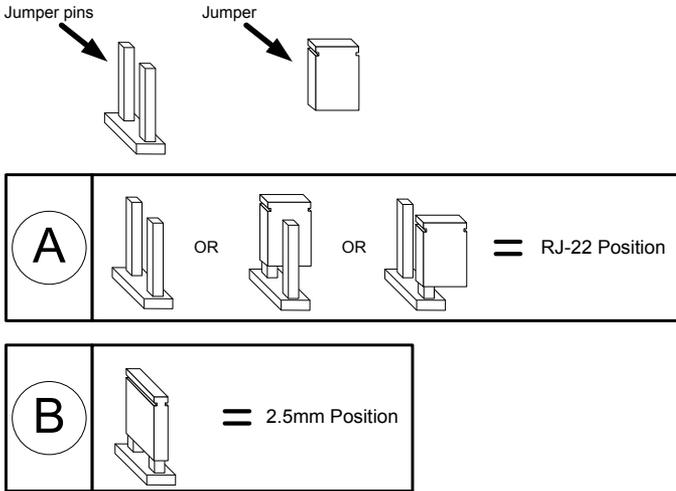


Figure 5: Setting the Internal Jumper



Jumper position **(A)** + connection to the RJ-22 jack = No transmittal of near side audio

Jumper position **(B)** + connection to the RJ-22 jack = **Caution!** Possible damage to the connected VoIP/digital phone

Simultaneous connection to the 2.5mm and RJ-22 jacks = **Caution!** Possible damage to the connected VoIP/digital phone

TECHNICAL SPECIFICATIONS:

Headset Jacks:	RJ-22 or 2.5mm TRS
Line-Level Audio Jacks:	6 Pos 5.08 Phoenix/Combicon
Headset I/O:	Transformer Isolated
Line-Level Audio I/O:	Transformer Isolated, Balanced
Maximum Input level:	+10dBu
THD+N:	< 0.1% typical (200Hz to 20kHz @ 0dBu), < 0.3% typical (100Hz to 200Hz @ 0dBu)
Frequency Response:	100Hz to 20kHz +/-0.5dB
Dimensions (HxWxD):	5.24" (133.1mm) x 2.10" (53.34mm) x 1.61" (40.89mm)
Weight:	1.75 lbs / 0.79 kg

BSS Audio has a policy of continued product improvement and accordingly reserves the right to change features and specifications without prior notice.



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